

IN THE CLAIMS:

Claims 1, 3-7, 9, 12-15, 17, and 19 are amended herein. Claims 2 and 8 are canceled. All pending claims and their present status are produced below.

1. (Currently Amended) A data quality system for matching input data across data records-record pairs of data, the system comprising:

means for pre-processing the input data to remove noise or reformat the input data;
training means, comprising, for a training data set comprising a portion of the data set;

means for matching record pairs of records of the training data set by matching based on measuring similarity of selected field pairs of data fields between within the each pair of records to generate for each pair of records a similarity vector comprising a plurality of similarity scores, and for generating a similarity indicator for each record, similarity score associated with a pair of data fields;
means for applying a set of rules to the data fields of the records and for applying weights to the plurality of similarity scores of each similarity vector for the training data set to calculate an overall similarity score for each pair of records in the training data set; and

means for determining, in response to user feedback with respect to the training data set, a set of adjusted rules and weights;

for a non-training data set comprising unmatched pairs of records of the data set, means for matching the pairs of records of the non-training data set by matching pairs of data fields between each pair of records to generate similarity vectors for the pairs of records of the non-training data set;

means for applying the set of adjusted rules and weights to similarity scores of the similarity vectors for the pairs of records of the non-training data set to calculate an overall similarity score for each pair of records in the non-training data set.

2. (Canceled)

3. (Currently Amended) A system as claimed in claim 2 claim 1, wherein the ~~vector extraction means for matching pairs of records of the training data set~~ comprises means for executing string matching routines on pre-selected field pairs of the records.

4. (Currently Amended) A system as claimed in claim 3, wherein a selected string matching routine comprises means for determining an edit distance indicating the number of edits required to change one value to ~~the other~~ another value.

5. (Currently Amended) A system as claimed in claim 3, wherein a selected string matching routine comprises means for comparing numerical values by applying numerical weights to digit positions.

6. (Currently Amended) A system as claimed in claim 2 claim 1, wherein the ~~vector extraction means for matching pairs of records of the training data set~~ comprises means for generating a vector value between 0 and 1 for each field pair of data fields in a record pair of records.

7. (Currently Amended) A system as claimed in claim 2 claim 1, wherein the ~~matching means for matching pairs of records of the training data set~~ comprises record scoring means for converting ~~the a similarity~~ vector into ~~a single~~ an overall similarity score representing overall similarity of the fields in each record pair.

8. (Canceled)

9. (Currently Amended) A system as claimed in claim 7, wherein the record scoring means comprises means for computing scores using an artificial intelligence technique to deduce from examples given by the user an optimum routine for computing the overall similarity score from the vector.

10. (Previously Presented) A system as claimed in claim 9, wherein the artificial intelligence technique used is cased based reasoning (CBR).

11. (Original) A system as claimed in claim 9, where the artificial intelligence technique used comprises neural network processing.

12. (Currently Amended) A system as claimed in claim 1, wherein the further comprising a pre-processing means for reformatting the data set, further comprising comprises a

standardization module comprising means for transforming each data field into one or more target data fields each of which is a variation of the original.

13. (Currently Amended) A system as claimed in claim 12, wherein the standardisation standardization module comprises means for splitting a data field into multiple field elements, ~~covertng~~ converting the field elements to a different format, removing noise characters, and replacing elements with equivalent elements selected from an equivalent table.

14. (Currently Amended) A system as claimed in ~~claim 1~~ claim 12, wherein the pre-processing means comprises a grouping module comprising means for grouping records according to features to ensure that all actual matches of a record are within a group, and wherein the matching means for matching pairs of records of the training data set comprises means for comparing records within groups only.

15. (Currently Amended) A system as claimed in claim 14, wherein the grouping module comprises means for applying labels to a record in which a label is determined for a plurality of fields ~~in-a~~ in the record and records are grouped according to similarity of the labels.

16. (Original) A system as claimed in claim 15, in which a label is a key letter for a field.

17. (Currently Amended) A system as claimed in ~~claim 1~~ claim 12, wherein the system further comprises a configuration manager comprising means for applying configurable settings for the preprocessing means and for the matching means for matching pairs of records of the training data set.

18. (Previously Presented) A system as claimed in claim 7, wherein the system further comprises a tuning manager comprising means for refining, according to user inputs, operation of the record scoring means.

19. (Currently Amended) A system as claimed in claim 18, wherein the tuning manager comprises means for using a rule-based approach for a first training run and ~~an~~ the artificial intelligence approach for subsequent training runs.